

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claims 1 – 25. (cancelled)

Claim 26. (currently amended) A freeze control system for a spa, wherein the spa is surrounded by ambient air defining ambient air temperature, said freeze control system comprising:

- A. a spa tub containing tub water having a tub water temperature,
- B. spa piping for circulating water to and from said spa tub,
- C. a heating element for producing heated water,
- D. at least one water pump for pumping the heated water,
- ~~E. a first sensor for detecting said tub water temperature,~~
- F. a second an ambient air temperature sensor for detecting said ambient air temperature and for generating ambient air temperature signals corresponding to said ambient air temperature, and
- G. a computer programmed to control said at least one water pump and to process said ambient air temperature signals, signals generated said first sensor and said second sensor, and selectively activate and deactivate said at least one water pump based upon inputs from said second sensor so that the temperature of the water inside said spa tub and said spa piping is maintained above the freezing level.

wherein said computer is programmed to receive said ambient air temperature signals from said ambient air temperature sensor and to start and run said at least one water pump after receiving said ambient air temperature signals, wherein said at least one water pump pumps water through said spa piping so that the temperature of the water inside said spa piping is maintained above freezing level.

Claim 27. (currently amended) A freeze control system as in Claim 26, wherein said computer comprises computer components and said ambient air temperature

~~sensor second-sensor~~ is mounted so as to be relatively unaffected by heat generated by said computer components.

Claim 28. (currently amended) A freeze control system as in Claim 26, wherein said computer comprises computer components and said ambient air temperature sensor ~~second-sensor~~ is mounted so as to be affected by heat generated by said computer components.

Claim 29. (previously presented) A freeze control system as in Claim 28, wherein said computer programming comprises a correction factor to account for the heat generated by said computer components.

Claim 30. (currently amended) A freeze control system as in Claim 26, wherein said computer is programmed to start and run said at least one water pump for a predetermined period of time at intervals based on said ambient air temperature signals. ~~reported by said second-sensor.~~

Claim 31. (previously presented) A freeze control system as in Claim 30, wherein said predetermined period of time is one minute.

Claim 32. (currently amended) A freeze control system for a spa, wherein the spa is surrounded by ambient air defining ambient air temperature, said freeze control system comprising:

- A. a spa tub containing tub water having a tub water temperature,
- B. spa piping for circulating water to and from said spa tub,
- C. a heating element for producing heated water,
- D. at least one air blower for blowing air into said spa tub,
- E. at least one water pump for pumping the heated water,
- F. ~~a first sensor for detecting said tub water temperature,~~

G. ~~a second~~ an ambient air temperature sensor for detecting said ambient air temperature and for generating ambient air temperature signals corresponding to said ambient air temperature, and

H. a computer programmed to control said at least one water pump and to process said ambient air temperature signals ~~signals generated by said first sensor and said second sensor~~, wherein ~~said computer selectively activates and deactivates said at least one air blower and said at least one water pump so that the temperature of the water inside said spa tub and said spa piping is maintained above the freezing level.~~

wherein said computer is programmed to receive said ambient air temperature signals from said ambient air temperature sensor and to start and run said at least one water pump after receiving said ambient air temperature signals, wherein said at least one water pump pumps water through said spa piping so that the temperature of the water inside said spa piping is maintained above freezing level.

Claim 33. (currently amended) A freeze control system as in Claim 32, wherein said computer comprises computer components and said ambient air temperature sensor ~~second sensor~~ is mounted so as to be relatively unaffected by heat generated by said computer components.

Claim 34. (currently amended) A freeze control system as in Claim 32, wherein said computer comprises computer components and said ambient air temperature sensor ~~second sensor~~ is mounted so as to be affected by heat generated by said computer components.

Claim 35. (previously presented) A freeze control system as in Claim 34, wherein said computer programming comprises a correction factor to account for the heat generated by said computer components.

Claim 36. (currently amended) A freeze control system as in Claim 32, wherein said computer is programmed to start and run said at least one water pump and said at least one blower for a predetermined period of time at intervals based on said ambient air temperature signals, ~~reported by said second sensor.~~

Claim 37. (previously presented) A freeze control system as in Claim 36, wherein said predetermined period of time is approximately one minute.

Claim 38. (currently amended) A freeze control system for a spa, wherein the spa is surrounded by ambient air having an ambient air temperature, said freeze control system comprising:

- A. a spa tub means for containing tub water having a tub water temperature,
- B. spa piping means for circulating water to and from said spa tub,
- C. a heating element means for producing heated water,
- ~~D. at least one air blower means for blowing air into said spa tub;~~
- E. at least one water pump means for pumping the heated water,
- ~~F. a first sensor means for detecting said tub water temperature;~~
- G. ~~a second sensor~~ an ambient air temperature sensor means for detecting said ambient air temperature and for generating ambient air temperature signals corresponding to said ambient air temperature, and
- H. a computer means programmed to control said water pump means and to process said ambient air temperature signals, ~~signals generated by said first sensor means and said second sensor means;~~ wherein said computer means selectively activates and deactivates said at least one air blower means and said at least one water pump means so that the temperature of the water inside said spa tub means and said spa piping means is maintained above the freezing level.

wherein said computer means is programmed to receive said ambient air temperature signals from said ambient air temperature sensor means and to start and run said at least one water pump means after receiving said ambient air temperature signals, wherein said at least one water pump means pumps water

through said spa piping means so that the temperature of the water inside said spa piping means is maintained above freezing level.

Claim 39. (new) A freeze control system as in Claim 26, further comprising a tub water temperature sensor for detecting said tub water temperature and for generating tub water temperature signals, wherein said computer is further programmed to receive said tub water temperature signals and to start and run said at least one water pump after receiving said tub water temperature signals, wherein said at least one water pump pumps heated water into said spa tub.

Claim 40. (new) A freeze control system for a spa, wherein the spa is surrounded by ambient air defining ambient air temperature, said freeze control system comprising:

- A. a spa tub containing tub water having a tub water temperature,
 - B. spa piping for circulating water to and from said spa tub,
 - C. a heating element for producing heated water,
 - D. at least one water pump for pumping the heated water,
 - E. a first sensor for detecting said tub water temperature,
 - F. a second sensor for detecting said ambient air temperature, and
 - G. a computer programmed to control said at least one water pump and to process signals generated by said first sensor and said second sensor,
- wherein said computer is programmed to receive ambient air temperature input from said second sensor and to start and run said at least one water pump after receiving said ambient air temperature input, wherein said at least one water pump pumps water through said spa tub and said spa piping so that the temperature of the water inside said spa tub and said spa piping is maintained above freezing level.